IN THE CLAIMS:

Please cancel claims 7 and 25 without prejudice or dedication.

Please rewrite the indicated claims to read as follows:

A¹

1 1. A traffic light violation prediction system for a traffic
2 signal having a current light phase comprising one of the set
3 consisting of at least red and green, comprising:
4   at least one violation prediction image capturing device,
5 said violation prediction image capturing device providing image
6 data representative of at least one vehicle approaching said
7 traffic signal;
8   a violation prediction unit, responsive to said violation
9 prediction image capturing device and an indication of said
10 current traffic light phase, wherein said violation prediction
11 unit is operative to generate a violation probability score for
12 said at least one vehicle approaching said traffic signal, said
13 violation probability score reflecting a likelihood that said at
14 least one vehicle will violate a red light phase of said traffic
15 signal; and
16   wherein said violation prediction system is further operable
17 to record at least one image of said at least one vehicle
18 approaching said traffic signal responsive to a determination
19 that said violation probability score is at least as large as a
20 predetermined threshold.

A2

1 17. The system of claim 16, wherein said prediction unit further
2 determines whether said required deceleration is larger than a
3 specified deceleration value limit, and if so, updates a
4 violation prediction value for the current frame to indicate that

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5   a violation is predicted based on the information contained in
6   the current frame.

A2 Cancel

17.
1   18. A method for predicting and recording a traffic light
2   violation of a traffic signal having a current light phase
3   comprising one of the set consisting of at least red and green,
4   comprising:
5   providing image data representative of at least one vehicle
6   approaching said traffic signal; and
7   generating, responsive to said image data and an indication
8   of said current traffic light phase, a violation probability
9   score for said at least one vehicle approaching said traffic
10 signal, said violation probability score reflecting a likelihood
11 that said at least one vehicle will violate a red light phase of
12 said traffic signal; and
13   recording at least one image of said at least one vehicle
14 approaching said traffic signal responsive to a determination
15 that said violation probability score is at least as large as a
16 predetermined threshold.

A3 Cancel

21.
1   22. The method of claim 17, further comprising recording a
2   plurality of violation images of said at least one vehicle
3   approaching said traffic signal, said vehicle having a violation
4   probability score at least as high as any other of said at least
5   one vehicle approaching said traffic light.

22.   17
1   23. The method of claim 18, further comprising allocating
2   violation recording resources responsive to said violation
3   probability score.

4   Please add the following new claims:

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A4

Cont'd

33. A traffic light violation prediction system for a traffic
signal having a current light phase comprising one of the set
consisting of at least red and green, comprising:
    at least one violation capturing resource; and
    a violation prediction unit, responsive to said violation
prediction image capturing device and an indication of said
current traffic light phase, wherein said violation prediction
unit is operative to generate a violation probability score for
said at least one vehicle approaching said traffic signal, said
violation probability score reflecting a likelihood that said at
least one vehicle will violate a red light phase of said traffic
signal; and
    wherein said violation prediction system is further operable
to allocate said at least one violation capturing resource to
capture image data showing said at least one vehicle in the event
that said violation probability score satisfies a predetermined
criteria.

34. The system of claim 33, wherein said predetermined criteria
is satisfied in the event that said violation probability score
is at least as large as a predetermined threshold.

35. The system of claim 33, wherein said predetermined criteria
is satisfied in the event that said violation probability score
is at least as large as a violation probability score for at
least one other vehicle approaching said traffic signal.

36. The system of claim 33, wherein said at least one violation
capturing resource comprises at least one violation prediction
image capturing device, said violation prediction image capturing
device providing image data showing at least one vehicle

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5   approaching said traffic signal.

1   **37.** ~~39~~. The system of claim **36** ~~38~~, wherein said violation prediction
2   image capturing device comprises at least one video camera.

1   **38.** ~~40~~. The system of claim **36** ~~38~~, wherein said violation prediction
2   image capturing device comprises at least one digital camera.

1   **39.** ~~41~~. The system of claim **33** ~~35~~, wherein said violation probability
2   score further reflects a likelihood that said at least one
3   vehicle has violated a red light phase of said traffic signal.

1   **40.** ~~42~~. The system of claim **33** ~~35~~, wherein said violation prediction
2   unit comprises software executing on a processor.

1   **41.** ~~43~~. The system of claim **33** ~~35~~, wherein said violation prediction
2   unit is further responsive to a time remaining in red light phase
3   input.

1   **42.** ~~44~~. The system of claim **33** ~~35~~, wherein said violation prediction
2   unit records a violation prediction value regarding said at least
3   one vehicle approaching said traffic signal.

1   **43.** ~~45~~. The system of claim **42** ~~44~~, wherein said violation prediction
2   value indicates a predicted violation in a first state, and
3   indicates no predicted violation in a second state.

1   **44.** ~~46~~. The system of claim **35** ~~35~~, wherein said prediction unit is
2   further responsive to a current speed of said at least one
3   vehicle approaching said traffic intersection.

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1   45. The system of claim 33, wherein said prediction unit is
2   further responsive to a current acceleration of said at least one
3   vehicle approaching said traffic intersection.

1   46. The system of claim 33, wherein said prediction unit is
2   further responsive to a current position of said at least one
3   vehicle approaching said traffic intersection.

1   47. The system of claim 33, wherein said prediction unit is
2   further operable to compute a time remaining before said at least
3   one vehicle approaching said traffic intersection enters said
4   traffic intersection, responsive to determination of a current
5   acceleration of said vehicle.

1   48. The system of claim 47, wherein said prediction unit is
2   further operable to calculate a rate of deceleration required for
3   said at least one vehicle to stop within said time remaining
4   before said vehicle enters said traffic intersection.

1   49. The system of claim 48, wherein said prediction unit further
2   determines whether said required deceleration is larger than a
3   specified deceleration value limit, and if so, updates a
4   violation prediction value for the current frame to indicate that
5   a violation is predicted based on the information contained in
6   the current frame.

1   50. A method for predicting and recording a traffic light
2   violation of a traffic signal having a current light phase
3   comprising one of the set consisting of at least red and green,
4   comprising:
5   providing a first set of image data representative of at

6   least one vehicle approaching said traffic signal;

7   generating, responsive to said first set of image data and

8   an indication of said current traffic light phase, a violation

9   probability score for said at least one vehicle approaching said

10   traffic signal, said violation probability score reflecting a

11   likelihood that said at least one vehicle will violate a red

12   light phase of said traffic signal; and

13   allocating at least one violation capturing resource to

14   capture a second set of image data showing said at least one

15   vehicle in the event that said violation probability score

16   satisfies a predetermined criteria.

1   53. The method of claim 52, further comprising determining that

2   said predetermined criteria is satisfied in the event that said

3   violation probability score is at least as large as a

4   predetermined threshold.

1   54. The method of claim 52, further comprising determining that

2   said predetermined criteria is satisfied in the event that said

3   violation probability score is at least as large as a violation

4   probability score for at least one other vehicle approaching said

5   traffic signal.

1   55. The method of claim 52, wherein said at least one violation

2   capturing resource comprises at least one violation prediction

3   image capturing device, said violation prediction image capturing

4   device providing image data showing at least one vehicle

5   approaching said traffic signal.

1   56. The method of claim 55, wherein said violation prediction

2   image capturing device comprises at least one digital camera.

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1   54. The method of claim 52, wherein said violation probability
2   score further reflects a likelihood that said at least one
3   vehicle has violated a red light phase of said traffic signal.

1   55. The method of claim 52, wherein said violation prediction
2   image capturing device comprises at least one video camera.

1   57. The method of claim 52, further comprising recording a
2   plurality of violation images of said at least one vehicle
3   approaching said traffic signal in the even that said vehicle has
4   a violation probability score at least as high as any other of
5   said at least one vehicle approaching said traffic light.

1   60. The method of claim 52, further comprising allocating
2   violation recording resources responsive to said violation
3   probability score.

1   61. The method of claim 60, wherein said violation recording
2   resources include at least one violation image capturing device.

1   62. The method of claim 52, wherein said generating is performed
2   by a violation prediction unit comprising software executing on a
3   processor.

1   63. The method of claim 52, wherein said generating said
2   violation probability score is further responsive to a time
3   remaining in red light phase input.

1   64. The method of claim 52, further comprising recording a
2   violation prediction regarding said at least one vehicle
3   approaching said traffic signal.

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63
1 65. The method of claim 62, wherein said violation prediction
2 indicates a predicted violation in a first state, and indicates
3 no predicted violation in a second state.

64
1 66. The method of claim 50, further comprising determining a
2 current speed by said violation prediction unit for at least one
3 vehicle approaching said traffic intersection.

65
1 67. The method of claim 50, further comprising determining a
2 current acceleration for said vehicle approaching said traffic
3 intersection.

66
1 68. The method of claim 50, further comprising computing a time
2 remaining before said vehicle approaching said traffic
3 intersection enters said traffic intersection, responsive to
4 determination of a current acceleration of said vehicle.

67
1 69. The method of claim 66, further comprising calculating, by
2 said violation prediction unit, a deceleration required for said
3 vehicle to stop within said time remaining before said vehicle
4 enters said traffic intersection.

68
1 70. The method of claim 67, further comprising:
2   determining, by said violation prediction unit, whether said
3 required deceleration is larger than a specified deceleration
4 value limit; and
5   updating a violation prediction value for the current frame
6 to indicate that a violation is predicted in the event that said
7 deceleration is larger than said specified deceleration value
8 limit.